

apoplexy # 1817

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No 3

A dissertation
on
Apoplexy

by Solomon Williams

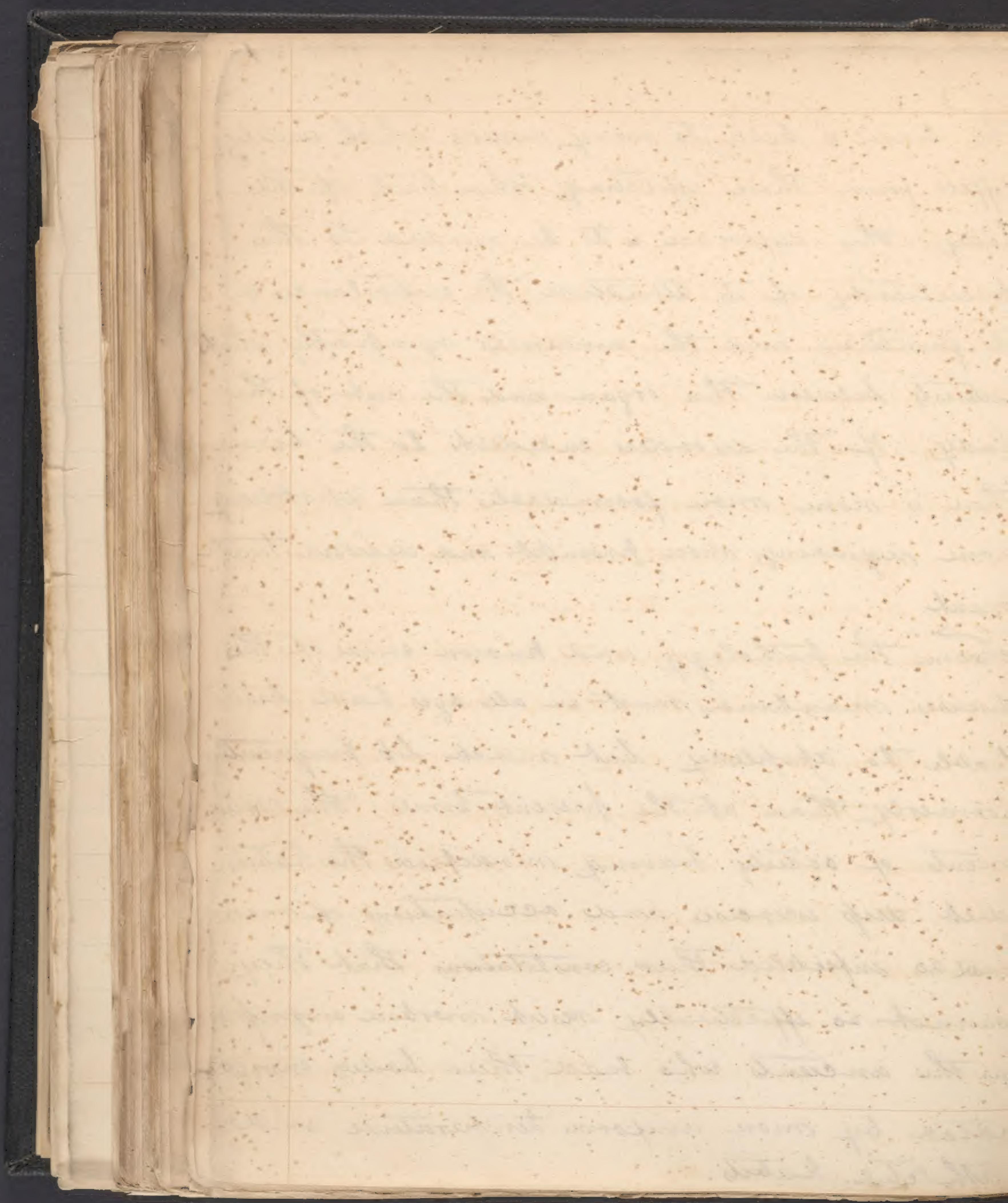
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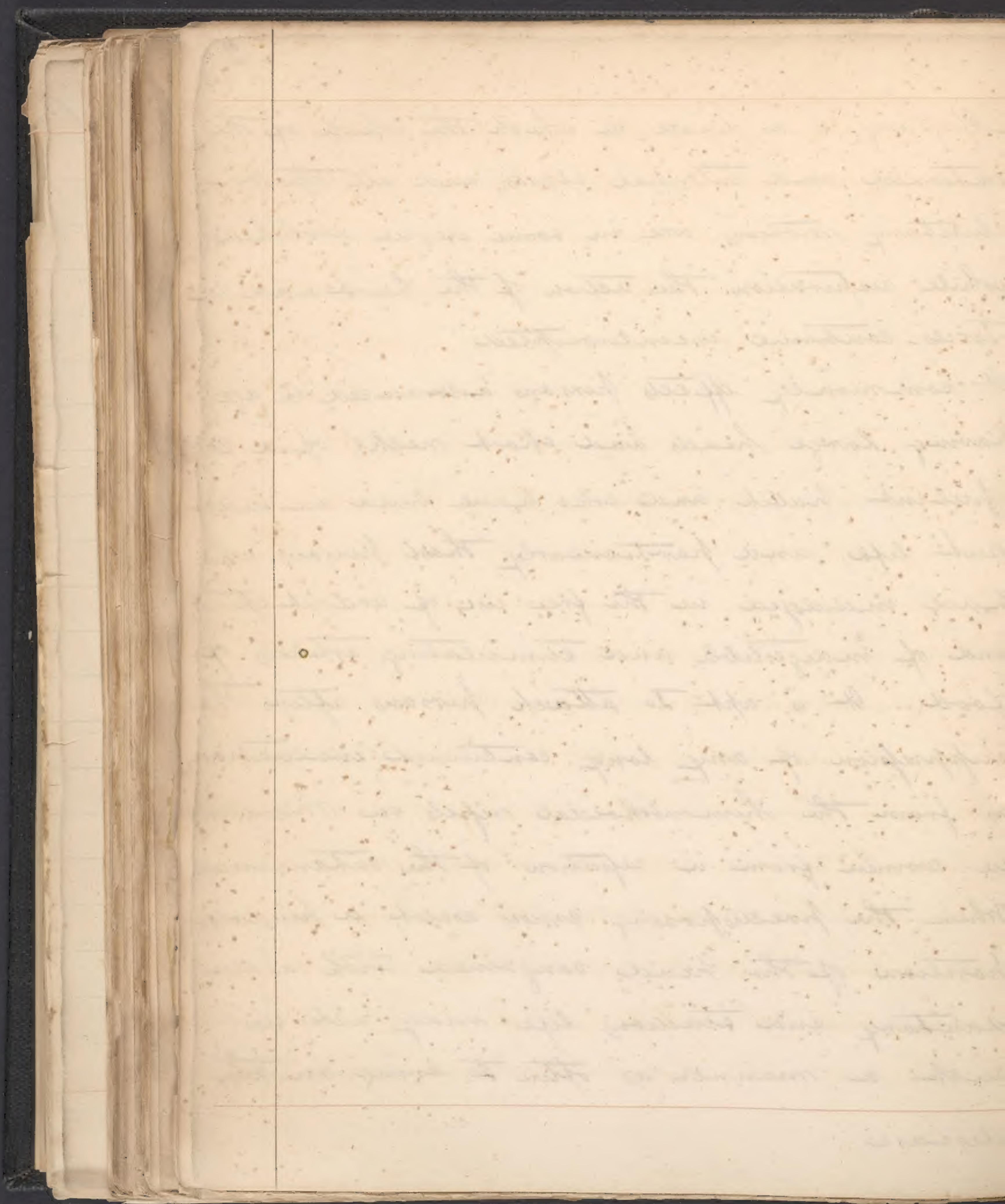
The brain is liable to many diseases which widely differ from those affecting other parts of the body. This difference is to be ascribed to the peculiarity of its structure, the importance of its functions and the universal sympathy which subsists between this organ and the rest of the body. Of the disorders incident to the brain there is none more formidable than apoplexy, none requiring more prompt and decisive treatment.

From the pathology and known causes of the disease, mankind must in all ages have been liable to apoplexy, but much less frequently formerly than at the present time. The refinements of society having modified the habits, diet, dress, exercise, and occupations of men have so enfeebled their constitutions that they cannot so effectually resist morbid impressions as the ancients who had their bodies invigorated by more uniform temperature and athletic habits.



Aphoplexy is a disease in which the whole of the external and internal senses, and all the voluntary motions, are in some degree abolished, while respiration, the action of the heart and arteries, continue uninterrupted.

It commonly affects persons advanced in age, having large heads and short necks, of a corpulent habit, and who have lived an indolent life, and particularly those persons who have indulged in the free use of ardent spirits, and of indigestible and stimulating articles of food. It is apt to attack persons after the suppression of any long continued evacuation, as from the hummorrhoidal vesels in men, and in women from a cessation of the catamenia. When the predisposing causes exist, a painful position of the head conjoined with a sedentary and studious life may act in such a manner as often to bring on the disease.



In some instances it attacks persons without any peculiar conformation of body, of intemperate habits and no evident predisposition.

From the different seats of the disease it has been properly divided into idiopathic and sympathetic.

When it is a primary affection of the head the attack is most frequently preceded by some precursory symptoms, as giddiness, dimness of sight, drowsiness, loss of memory, fattering of the Tongue *tinitus aurum* &c.

The paroxysm is known by the sudden falling of the patient, at which time the face becomes red and swollen, the veins of the head, the temples, the eyes and the neck appear turgid, the head feels hot the eyelids are half open and rigid, the eyes are prominent and fixed, with a dilatation of the pupils.

Respiration is hurried short and stertorous.

the pulse is quick, full, slow, and strong - In some instances a grinding of the teeth and among the most distinguishing symptom is a deep coma. When these symptoms continue for a time, the pulse becomes languid the respiration more laborious until it ceases altogether. In sympathetic apoplexy the attack is more gradual, it is preceded by frequent fits of insomnias, the face is pale and often swollen, the pupils of the eyes are either dilated, or contracted, the veins are distended, the pulse is weak irregular and intermittent, respiration is laborious and stertorous, the surface of the body is cold and flaccid exhibiting a prostration of the powers of the system. The exciting causes of idiopathic apoplexy are those which cause a determination of blood to the vessels of the head as violent passions of the mind as joy anger &c.

Let us now consider the
injury of the brain. It is evident to the
mind of a practitioner that irritation may produce
the same certain positions of the head before
marking the effects of internal and insinuating
the effects of known, blind from the head
may often indicate the disease. It is sometimes
caused by an accumulation of serum; from
an increased "exhalation" from the minute
pores of the head.

Mechanical injuries done to the head may
excite apoplexy, either by the violence of con-
cussion on the brain, by a fragment of bone
being forced in the cranium, by an effusion
of blood coagulating ^{limp} on pus, under the cranium,
between the membranes of the brain, or in the
substance of the brain, or in the ventricles
or it may happen in consequence of the infla-
mation which succeeds the injury.

There are certain chemical substances, which

exert great influence on the system and by their sudden and diffusely stimulating effect, have been long enumerated as causes of apoplexy.

Exposure of the naked head to the rays of the sun in warm climates, has by imparting unusual warmth to that part increased the force and velocity of the circulation, so as to produce an instantaneous attack.

In an over warm bath and the heat of a crowded room, often occurs the disease, especially in infatible habits where there is a plethoric disposition of the blood vessels. These are among the most important of the exciting causes, when it is a primary affection of the head.

The occasional causes of sympathetic apoplexy may be referred to those which act directly on the stomach to others which affect

it through the medium of some part, or of the whole system, and from its indissoluble association with the brain, causes a reaction in that organ as to disturb its functions and thence to produce apoplexy.

Among the most frequent of the exciting causes which ^{act} directly on the stomach, may be ranked mechanical distension from an accumulation of food, the swallowing of indigestible articles, drinking too copious a draught of ardent spirits or taking some powerful narcotic into the stomach.

Causes which ^{co}incidentally affect the stomach and by that means the brain may be enumerated. Certain diseased conditions of the liver, the uterus, and intestinal canal. A gouty diathesis of the constitution by its concomitant gastric derangement, is not an uncommon cause of this species of apoplexy.

Excessive venereal indulgence weakens the powers of digestion, increase the irritability of the nervous and arterial system, so as to produce the most violent form of this disease.

When a sufficiency of food is taken into the stomach to induce the disease, it first distends its coils, causes an enlargement of its diameter by which it presses on the vena cava ascendens obstructs the expansion of the lungs, thereby distending the vessels of the head, destroys the office of the brain producing all the symptoms of apoplexy.

The poisons which excite the disease are either stimulant or sedative, and may be taken in such quantities as to destroy life in a very short time. By the habitual use of Stimulating and narcotic

substances the chiro-pa~~tic~~ viscera are so much disengaged in their office, as to impair the energy of the nervous system, so that life is eventually destroyed by an apoplectic stroke.

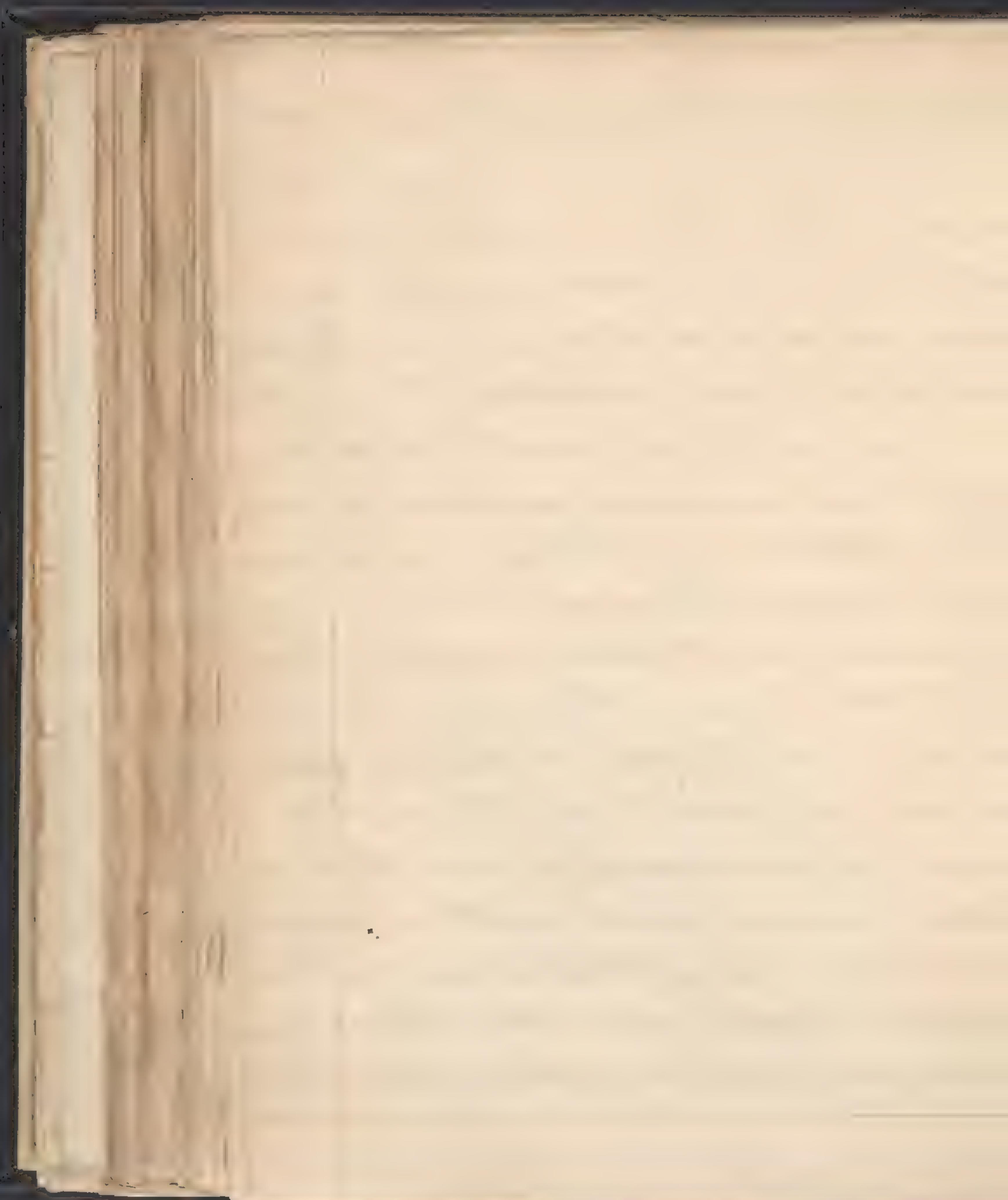
From the similarity in the operation and effects of the various narcotics, on account of the phenomena and consequent effects resulting from too large a dose of opium, may suffice to distinguish that form of the disease which arises from the use of vegetable poisons.

Opium when taken into the stomach first stimulates the part to which it is applied from whence the impression is communicated to the heart and arteries, the temperature of the body is increased, there is a diminution in all the excretions and excretions except that by the skin which

which is augmented in intensity, great thirst
the tongue and palate become dry and parch-
-ed, the mind continues at this period se-
-rene, but there is often a fitful and extilia-
tion of spirits: after this state of excitement
has continued for twenty or thirty minutes,
the action of the sanguiferous system is dim-
inished, as is witnessed by the slow irregular
pulse, a prostration of strength comes on,
accompanied by vertigo, delusion, stupor,
and an irresistible propensity to sleep, fol-
lowed by a loss of voluntary motion
and if not stopped in its operation life
is extinguished.

Among the occasional causes which act
secondarily on the stomach, may be
ranked that condition of the liver in
which there is a superabundant secretion
of bile, which regurgitating from the

lethrum into the stomach, often results in action the latent predisposition to the disease. Hector Muster whose opinion is entitled to the highest respect, several years since met with a case in practice which fully establishes this fact. A boy in fishing on the Spuyten Duyvil bridge, was suddenly seized with all the symptoms of apoplexy, in addition to these there was so great an atony of the lower jaw, that his mouth was constantly open. The doctor in examining his tongue or posterior fauces saw by a kind of eructation, bile in the patient's mouth; and that the disease was produced by the presence of bile, was fully established, by the immediate relief which the patient experienced from the operation of an emetic.



Suppre'sed evacuations by inducing
inequality of action, or plethora, in the
bloodvessels are frequent exciting causes
of the disease.

The prognosis is to be drawn from a
consideration of the predisposing causes, of the
antecedent symptoms, of the manner in which
it was excited, from the mild or aggravated
form of the attack, from the effects of re-
medies employed and the duration of the
paroxysm, together with the strength of
the constitution.

To avoid an attack when a predisposi-
-tion exists in the body, and when the
disease has been removed, to fortify the
system against a future return, are
circumstances of importance in the man-
-agement of the disease.

When a predisposition is known to



to exist. The temperature of the body should be regulated according to the season of the year, and every change in the atmosphere.—
The diet should be nutritive, and not stimulating and taken in small quantities, at short intervals. The exercise should be moderate, so as to induce perspiration, without fatigue, the patient should abstain from all stimulating drinks and avoid as much as possible mental agitation.
After the paroxysm has subsided to prevent the recurrence of an attack the exciting causes are to be avoided. Every condition of the body which favours a determination of blood to the head must be diminished, overdistension of the stomach and constipation of the bowels must be prevented, the mind should be engaged about some amusing employ-

-playment, so as to suspend the excitability of the propions and prevent a reaction on the brain. The free use of Tobacco, by increasing the irritability of the system and by its sedative effects inducing debility, and increasing the excretion from the salivary glands should be prohibited where there is a constant tendency to a plethoric state of the vessels in the head, ~~setons~~ on the scalp, or spines in the back of the neck, are highly proper, in every instance where a fit is threatened blood letting is the only remedy on which we can depend.

Intusions of the head done I am
guinea, noticing the arteries are very
of the head have been found in a
state of contraction the vessels in the brain
have been enlarged, and in many

instances the extravasation of blood has been observed in the substance of the brain or within the ventricles.

In those who die of sympathetic apoplexy, the arteries contain less and the veins more blood than in idiopathic apoplexy. The dura mater has lost its transparency, the pia mater and plexus choroides are pale. The brain is altered in its consistence, becoming flaccid. The left auricle and ventricle of the heart with the arteries are found empty, the pulmonary organs are engorged with blood. The stomach is much inflamed, and the intestines generally distended.

The cure of idiopathic apoplexy from the violence and fatality of its attack, requires the immediate and skilful application of remedies.

Every mechanical impediment to the circulation of the blood is to be removed, the patient should be placed in a well ventilated apartment, after this as copious, and sudden a depletion, must be made as the strength of the patient will bear, the most speedy and efficacious method of accomplishing this, is by means of bleeding from the temporal artery or from the veins of the arm.

By abstracting blood in this disease, the quantity of fluids in the vessels of the head are diminished, the undue impetus and irregularity in the action of the arteries are corrected, moreover by allowing a contraction in the diameters of the vessels the profuse from overdistension is removed, and the functions of the brain are more or less restored.

After the system is prepared by blood-letting for the action of other remedies drastic cathartics, and such as are quickest in their operation, seem highly indicated. By evacuating the alimentary canal the quantity of circulating fluids is diminished, and by their local stimulus, they occasion an affuse of blood to the intestines, and thereby cause a derivation from the head.

The purgative which answers best is the sulphat of soda, in an infusion of senna or the latter article combined with jalap, as alsoes.

To answer the same in nearly and to assist their operation, strong emetics should be frequently administered.

When in motion the vesicar

system is so much emptied as not to admit of a general lop of blood, the scarification, and cupping, gape to the occiput, with leeches to the temples, by unloading the superficial vessels of the scalp, will prove highly useful. The hair being removed from the head, a large blister should be applied over the whole of the scalp, and sinapism to the extremities, which by operating as counterirritants are very serviceable.

When the patient's strength will admit, an erect posture should be preferred, as it impedes the ascent of arterial, and favours the descent of venous blood: when this is inadmissible the patient should be kept in a recumbent posture, so as not to make pressure on the vessels of the neck.

If these measures are complied with promptly and pursued to a proper extent, they are calculated to do all the good practicable in this form of the disease.

Sympathetic apoplexy as originating from different causes, and occurring often in an opposite state of the system, demands a diversity of remedies. After having premissed the loss of blood, which is in many cases admissible and often absolutely necessary, we should immediately resort to emetics, which are indicated from a combination of symptoms which exists in an apoplectic paroxysm, and from the happiest effects resulting from a spontaneous vomiting whenever it has occurred. To remove the exciting causes and equalize the action of the system are the purposes for which they are prescribed.

When the excitability of the system is such that vomiting can be produced by taking an emetic a large quantity of crude and indigestible matter is vacuated by the operation. At this time a new action is excited in that viscus, by which a healthy tone is restored to it, and by returning the fluids to the surface of the body the lungs are relieved of an accumulation of blood, the respiration is rendered more free and the action of the heart and arteries more natural. By the mechanical effect of vomiting the diaphragm and abdominal muscles in pressing on the liver spleen and pancreas will often prop the accumulation of blood from these parts and thus remove obstruction which are often the primary link in the numerous morbid excitation on which the disease depends.

After the ejaculation of an enema a cathartic
of then submuriat of mercury, and rhubarb,
should be given to evacuate the alimentary
canal more thoroughly, and thereby remove
a source of much irritation, and to aid
it. calomel strong emetics should be ad-
ministered. Blisters and unaspissm should
be applied and where one side is pain-
fully effected they should be placed on that
which is least injured.

at this period of the disease local bleeding is necessary and when apoplexy has come on in consequence of a suppusion of hemorrhoids, or epistaxis, the application of iceches to the nostrils, or hemorrhoidal vessels, should not be neglected.

The exciting cause of the disease being removed, from the effects of pain and the use of the various ^{unmedic} system will be found in many instances reduced below the standard of health. In this state Tonics will be found indispensable, especially in that species of the disease which is consequent to the use of stimulating drinks, and they should be graduated so as to invigorate the system, without inducing plethora. The Tonics which answer this indication best are the aquafia, columbo, gentian, or the chalybeat preparations, in combination with rhubarb.

When the disease has arisen in consequence of opium or any other narcotic being taken into the stomach, the matter should be evacuated as soon as possible which may sometimes be done either with a large dose of the Sulphat of zinc - Yarrowized Antimony, or Siccacanthus or by titillation of the posterior fauces with a feather. When from the exhausted vitality of the stomach, these measures fail, an instrument which has been introduced into practice in the United States by Doctor P. S. Physick, may be employed to extract Laudanum, or any poisonous substance from the stomach: after which health may be restored by means of stimulants accommodated to the excitability of the system. 2. - carbonate of ammonia, or strong and water injected into the stomach, are very proper remedies, clysters of turpentine,

and gum araback, are in this state very
useful. - Melons and trifles together with
sorplings, biscuits and warm fomentations,
in taking of vegetables, are doubtless effica-
cious remedies in this atomic condition of
the body.

